

# Metal Complexes Produced by Maillard Reaction Products

## Abstract

A method is disclosed for the formation of metal chelates which are able to remain stable in high alkaline environments when compared to metal chelates produced from a reaction with amino acids. The method involves the reaction of sugars, amino groups, and metal components for a sufficient period of time and temperature in a water solution. Additionally, the stability of metal chelates can be enhanced by oxidation of the sugars with an oxidizing agent such as hydrogen peroxide which form an MRP which will react with the metal component to form a more stable metal chelate than if oxidation were not utilized.